

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A process for the preparation of alkylaryl compounds ~~by, comprising:~~

- a) ~~reaction of~~ reacting a C₄/C₅-olefin mixture over a metathesis catalyst to prepare a C₄₋₈-olefin mixture comprising 2-pentene, and ~~optional removal of~~ optionally removing the C₄₋₈-olefin mixture,
- b) ~~removal of~~ removing from 5 to 100% of the 2-pentene present in stage a) and ~~subsequent reaction~~ subsequently reacting over an isomerization catalyst to give a mixture of 2-pentene and 1-pentene which is returned to stage a),
- c) ~~dimerization of~~ dimerizing the C₄₋₈-olefin mixture obtained in stage b) following removal in the presence of a dimerization catalyst to give a mixture containing C₈₋₁₆-olefins, ~~removal of~~ removing these C₈₋₁₆-olefins and ~~optional removal of~~ optionally removing a partial stream thereof,
- d) ~~reaction of~~ reacting the C₈₋₁₆-olefin mixtures obtained in stage c) or ~~of~~ the partial stream with an aromatic hydrocarbon in the presence of an alkylation catalyst to form alkyl aromatic compounds where, prior to the reaction, 0 to 60% by weight, based on the C₈₋₁₆-olefin mixtures obtained in stage c), of linear olefins may additionally be added,
- e) ~~optional sulfonation of~~ optionally sulfonating the alkyl aromatic compounds obtained in stage d) and ~~neutralization~~ neutralizing to give alkylarylsulfonates, where, prior to the sulfonation, 0 to 60% by weight, based on the alkyl aromatic compounds obtained in stage d), of linear alkylbenzenes may additionally be added if no admixing has taken place in stage d), and

f) ~~optional~~ optionally mixing of the alkylarylsulfonates obtained in stage e) with 0 to 60% by weight, based on the alkylarylsulfonates obtained in stage e), of linear alkylarylsulfonate, if no admixing has taken place in stages d) and e).

Claim 2 (Original): The process according to claim 1, wherein, in at least one of stages d), e) and f), 5 to 60% by weight, in each case based on the mixtures present in the preceding stage, of the linear compounds are added, and the sum of the additions is not more than 80% by weight.

Claim 3 (Currently Amended): The process according to claim 1 ~~or 2~~, wherein the metathesis catalyst in stage a) is chosen from compounds of a metal of group VIb, VIIb or sub-group VIII of the Periodic Table of the Elements and/or, in stage b), a dimerization catalyst is used ~~which comprises~~ comprising at least one element of sub-group VIII of the Periodic Table of the Elements.

Claim 4 (Original): The process according to claim 1, wherein the dimer-olefin mixtures obtained in stage b) have an average degree of branching in the range from 1 to 2.5.

Claim 5 (Original): The process according to claim 1, wherein the C₄₋₈-olefin mixture introduced into stage c) comprises 0 to 10 mol% of butenes, 10 to 40 mol% of pentenes, 60 to 80 mol% of hexenes, 5 to 30 mol% of heptenes and 0 to 15 mol% of octenes, the total amount of which is 100 mol%.

Claim 6 (Original): The process according to claim 1, wherein the C₁₋₁₆-olefin mixture introduced into stage d) and/or the partial stream comprises less than 5 mol% of C_{<10}-

olefins, 5 to 15 mol-% of C₁₀-olefins, 35 to 55 mol% of C₁₁-olefins, 25 to 45 mol% of C₁₂-olefins, 5 to 15 mol% of C₁₃-olefins and less than 5 mol% of C_{>13}-olefins, the total amount of which is 100 mol%.

Claim 7 (Currently Amended): The process according to claim 1, wherein, in stage c), an alkylation catalyst is used ~~which~~ that leads to alkyl aromatic compounds ~~which~~ that have 1 to 3 carbon atoms with an H/C index of 1 in the alkyl radical.

Claim 8 (Currently Amended): An alkylaryl or alkylarylsulfonate ~~obtainable~~ obtained by a process according to claim 1.

Claim 9 (Currently Amended): ~~The~~ A method ~~of~~ comprising the use of surfactants, comprising using of the alkylarylsulfonates according to claim 8 as surfactants.

Claim 10 (Original): A detergent or cleaner comprising, besides customary ingredients, alkylarylsulfonates according to claim 8.